LIGHTING for tomorrow 2005

Results to Date and Update on New Competition

Kelly Gordon, PNNL

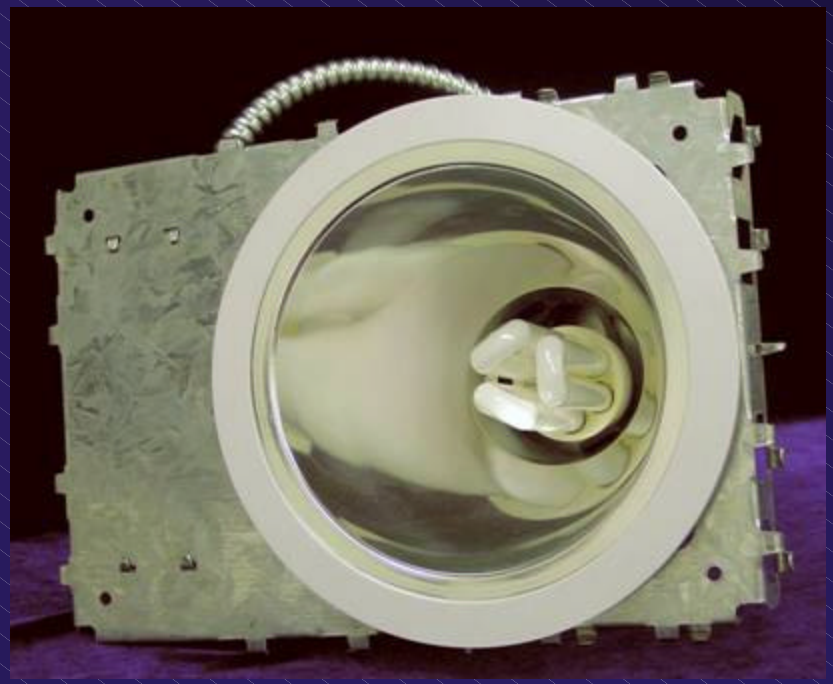
April 6, 2005

american lighting association

CEE Together We Can Change National Markets

Recessed Downlights

- RFPs in 2002 and 2004
- Product testing in IC environment
- Heat Management Workshop, Nov 2004
- Heat management concepts
- On-going technical assistance
- Short-term testing to validate ballast case operating temperature



Reflector CFLs

- **1st RFP – 8 models qualified for elevated temperature life testing**
- **2 products passed minimum 6000 hours**
  - Philips EL/A BR30 16w and SLS/R40 20w
- **Second draft RFP available for review**

What is Lighting for Tomorrow?

- **Partnership:**
  - Industry (ALA)
  - Government (DOE)
  - Energy efficiency community (CEE)
- **Lighting fixture design competition**
- **Forum for addressing market barriers**
- **Started in 2002**

1st Competition was Successful

- **2003-2004**
- **Rewarded attractive, innovative, marketable designs**
- **Focused attention on energy-efficient lighting fixtures**

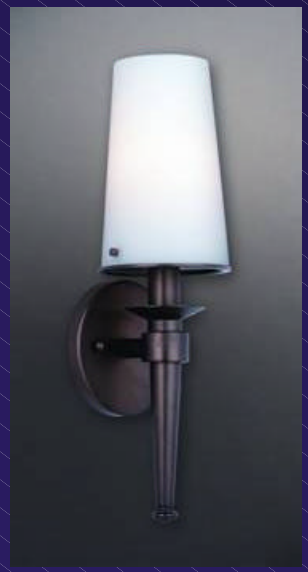
Grand Prize Winner

American Fluorescent

Second Place Winners

Lightolier

Soren Momsen



Forecast

Rules

2003-04 Competition

- **Open to fixture manufacturers, designers, students**
- **ENERGY STAR efficacy requirement**
- **All pin-based fixtures**
- **2 phases: designs, then prototypes**
- **Seven fixture types**
  - Chandelier, pendant, portable, sconce, surface-mount, task, track

Judges

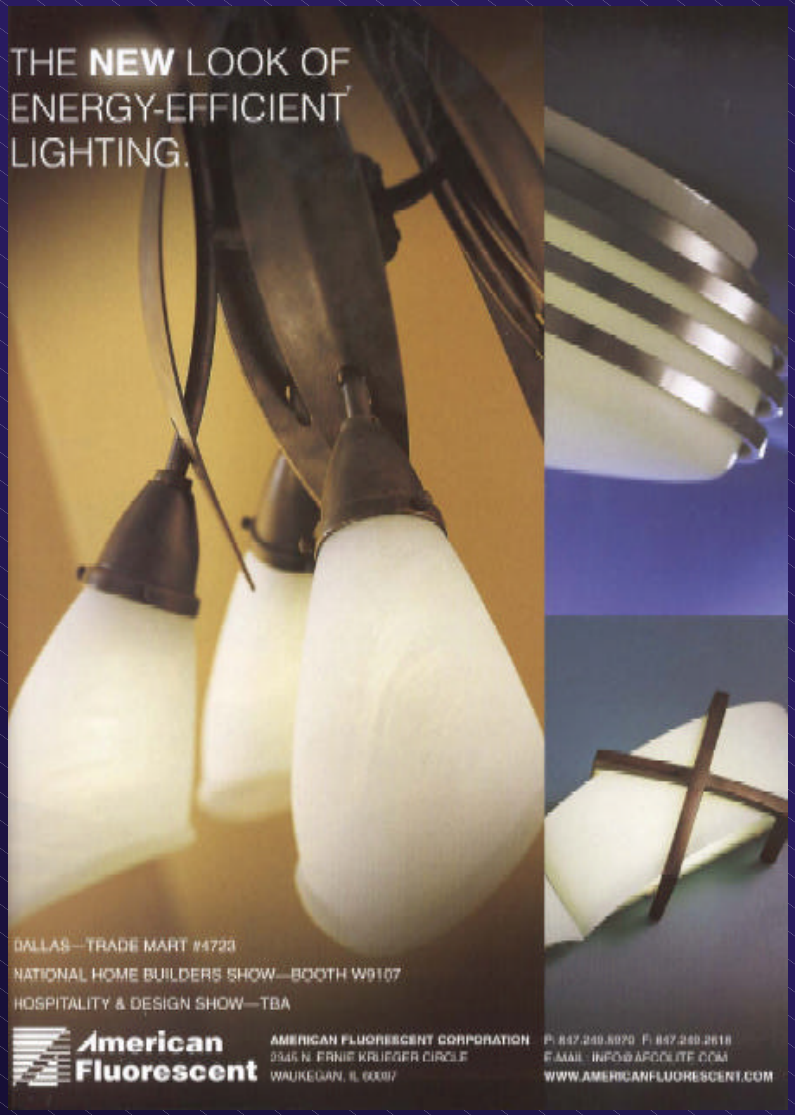
- Lighting showrooms
- Homebuilders
- Interior designers
- Lighting designers
- Lighting energy efficiency experts
- Consumer magazines

Selection Criteria

- **Potential Market Impact**
  - Attractiveness
  - Value
  - Marketability
- **Innovation in use of components and materials**
- **Functionality – providing high quality illumination for the intended application**

Industry Response
2003-04 Competition

- 272 expressions of interest
- 156 paper designs received
- 24 finalists selected
- 18 prototypes received
- 4 winners selected


THE NEW LOOK OF
ENERGY-EFFICIENT
LIGHTING.
DALLAS—TRADE MART #4723
NATIONAL HOME BUILDERS SHOW—BOOTH W9107
HOSPITALITY & DESIGN SHOW—TBA
American Fluorescent
AMERICAN FLUORESCENT CORPORATION
2345 N. ERNIE KRUEGER CIRCLE
WAUKEGAN, IL 60087
P: 847.249.5070 F: 847.249.2618
E-MAIL: INFO@AFCOLITE.COM
WWW.AMERICANFLUORESCENT.COM

RESIDENTIAL
LIGHTING
JANUARY 2005
design
of the times
DEFINING MILLENNIAL STYLE • DALLAS INTRODUCTIONS

IRISCOLLECTION
• Distinctive leaf detail
• Unique earth tone finish
• Petal shaped enclosed glass diffuser
• Lamps included
• Electronic Ballast

IRP513ETEC

WYOMINGCOLLECTION
• Cold river rust finish
• Faux alabaster enclosed glass diffusers
• Lamps included
• Electronic ballast

WELLESLEYCOLLECTION

Changes in 2005:

- **Indoor fixture families (3 or more)**
- **Outdoor fixture families (2 or more)**
- **Technology innovation category**
- **Shorter timeline**
  - One phase instead of two -- complete in 2005
- **Must be capable of meeting ENERGY STAR v4.0**
  - Winners must agree to earn ES within 1 year

2005 Timeline

- **January 15** Announce competition
- **March 15** Intent forms due
- **May 15** Designs/prototypes due
- **June 6-7** Judging
- **July** Winners notified
- **Sept 17-20** Winners announced at ALA conference in Miami

2005 Sponsorship

- **American Lighting Association**
- **Consortium for Energy Efficiency**
  - 25 utilities and regional energy efficiency programs
- **U.S. Department of Energy**
  - Represented by PNNL

Award Categories

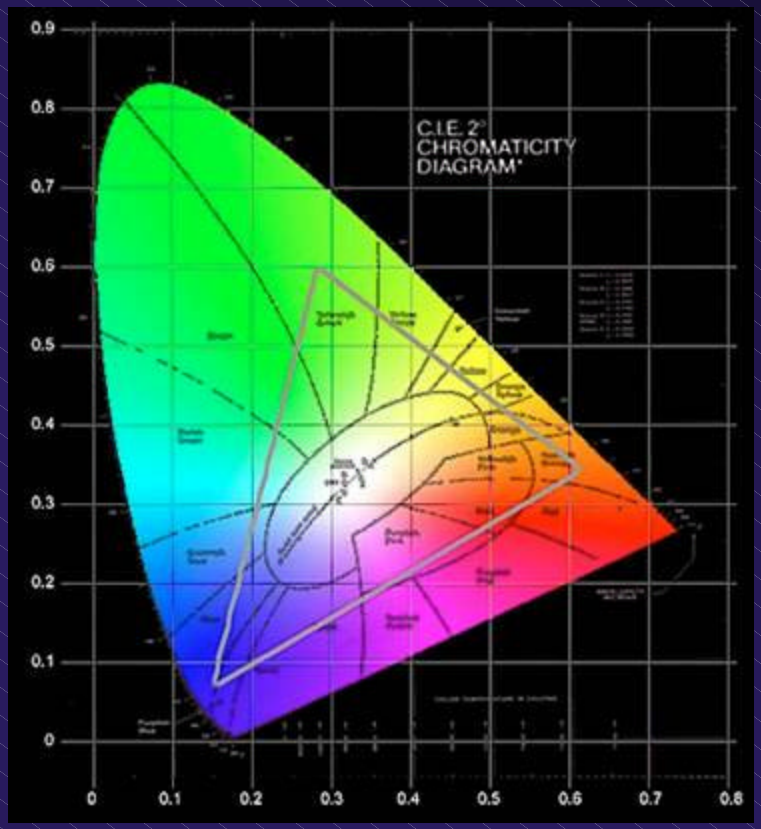
- **Indoor Fixture Families**
  - Grand Prize $15,000
  - Runner-Up $7,500
- **Outdoor Fixture Families**
  - Grand Prize $15,000
  - Runner-Up $7,500
- **Technology Innovation**
  - One award of $15,000

Other LFT Activities

- **CEE Fixture/Fan Group**
  - Residential fixture program template for efficiency programs
  - Develop educational resources to support high-efficiency fixtures
  - Propose color naming system

Other LFT Activities

- **Color issues**
  - On-going market barrier for fluorescent sources
  - How to communicate color characteristics to consumers?



Other LFT Activities

- **Promotion and education**
  - Press releases
  - Local events showcasing winners
  - Presentations to industry groups
  - Exhibit winning fixtures
  - Change-a-Light tie-in

Future Directions

- **More LEDs, assuming:**
  - White LED efficacy minimum 50 lpw
  - Life rating system adopted by industry
  - Acceptable white color
- **CFL-LED hybrids**
- **Architecturally-integrated**
- **Technical innovation**

Lumileds

Boschke

More Information

- **Contact the organizers**
  - Terry McGowan, ALA, 216-291-1884, lighting@ieee.org
  - Kelly Gordon, PNNL, 503-417-7558, kelly.gordon@pnl.gov
  - Rebecca Foster, CEE, 617-589-3949, rfoster@cee1.org
- **Visit www.LightingForTomorrow.com**